In re Application of:	Shmuel Shaffer et al.
Serial No.:	10/039,157
Filing Date:	December 31, 2001
Group Art Unit:	2616
Confirmation No.:	9347
Examiner:	Steven Blount
Title:	System and Method for Assigning Call Priority

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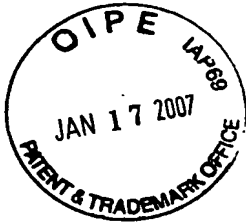*Willie Jiles*
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**In The United States Patent and Trademark Office
On Appeal From The Examiner To The Board
of Patent Appeals and Interferences**

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Dear Sir:

Appeal Brief

Appellants have appealed to the Board of Patent Appeals and Interferences from the decision of the Examiner in an Office Action mailed June 29, 2006 (the "Office Action") finally rejecting Claims 1, 3-20, 22-39 and 41-60, all of which are pending in this case. Appellants filed a response to the final Office Action on August 25, 2006, and the Examiner mailed an Advisory Action on October 17, 2006. Appellants filed a Notice of Appeal on November 17, 2006. Appellants respectfully submit this Appeal Brief with the statutory fee of $500.00.

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REAL PARTY IN INTEREST

This application is currently owned by Cisco Technology, Inc., as indicated by an assignment recorded on December 31, 2001 in the Assignment Records of the United States Patent and Trademark Office at Reel 012465, Frame 0036-0040.

RELATED APPEALS AND INTERFERENCES

There are no known appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision regarding this appeal.

STATUS OF CLAIMS

Claims 1, 3-20, 22-39 and 41-60 are pending in this application. Claims 1, 3-20, 22-39 and 41-60 are rejected pursuant to a final Office Action mailed June 29, 2006, and are all presented for appeal. All pending claims are shown in Appendix A.

Appellants note that an Advisory Action mailed on October 17, 2006 did not state that Claims 1, 3-20, 22-39 and 41-60 remained rejected. However, pursuant to a telephonic interview on November 2, 2006 with the Examiner it was confirmed that Claims 1, 3-20, 22-39 and 41-60 remained rejected. The interview summary was mailed on November 21, 2006.

STATUS OF AMENDMENTS

Appellants submitted amendments to Claims 9, 14, 28, 33, 47, 52, and 59 in Appellants' Response to Final Office Action filed August 25, 2006. The amendments to Claims 9, 28, 47 and 59 were to add "to maintain a first quality of service level," and the amendments to Claims 14, 33 and 52 were to add "based on the first quality of service." The Advisory Action mailed October 17, 2006 indicates that the amendments were not entered. The submitted amendments to Claims 9, 14, 28, 33, 47, 52, and 59 are shown in Appendix B, attached hereto. Appellants respectfully request that these amendments be entered. All other amendments have been entered.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to systems and methods for assigning call priority. Referring to FIG. 1, communications network 10 may include any computer and/or communication network or other suitable packet switched network. Communication network 10 may comprise private network 12 (which includes a call manager 20, a certificate server 22, a plurality of routers 24, and a plurality of gateways 26) and public network 14 (which includes a plurality of routers 24 and gateways 26). Page 6, lines 11-27.

Private network 12 comprises call manager 20 which is operable to receive call setup requests and other information from terminal units 18 and set up connections so as to direct communications traffic through routers 24 to the various requested destinations. Call manager 20 may append a destination address to call packets sent from terminal unit 18 or may provide a destination address to terminal unit 18 during the call setup for terminal unit 18 to attach to its call packets. Call manager 20 may comprise priority module 30 which is operable to determine a priority for a requested connection based on a dialed number. Priority module 30 is further operable to determine a relative priority of the requested connection. This is accomplished through priority destination list 36, which includes a data set regarding the various terminal devices 18 and their relative priority as destinations for requested connections. Page 7, lines 5-22. Private network 12 also comprises certificate server 22 which includes certificate generator 28. Certificate generator 28 is operable to generate a priority certificate based on priority information. Page 8, lines 22-24.

Referring now to FIG. 3, at step 100 a request to establish a connection is received. Next, at Step 105, a path through private network 12 to establish the requested connection is determined. Next, at decisional Step 110, a determination is made whether adequate resources are presently available to establish the requested connection. Also at Step 110, a determination is made as to the resources required to establish the requested connection that are presently being used by other, lower-priority connections. If sufficient resources are available to establish the connection, the process continues along the Yes branch of decisional Step 110 to Step 115 wherein the connection is established. If sufficient resources are not available to establish the requested connection, the process continues along the No branch of decisional Step 110 to decisional Step 120. At decisional Step 120, a

determination is made whether the destination terminal unit 18 of the requested connection is a priority destination. Page 10, lines 13-32.

If the destination terminal unit 18 is not a priority destination, the process continues along the No branch to Step 125. At Step 125, the ordinary processing of calls along private network 12 is performed. After normal processing at Step 125, the process ends. If, at decisional Step 120, it is determined that the destination terminal unit 18 is a priority destination, the process continues along the Yes branch to Step 130. At Step 130, priority is granted to the established connection to network resources. Priority may be granted to the requested connection in a variety of ways. Non-limiting examples include: increasing the priority of the call to computer processing unit (CPU) threads processing a high-priority call; increasing the priority of network voice packets relative to other packets; increasing the priority to access gateway trunks relative to other connections destined for terminal units 18 located outside of private network 12; increasing the Class of Service (CoS) or Quality of Service (QoS) parameter for the call; and increasing the priority to access network bandwidth for voice quality relative to other connections. Page 11, lines 2-21.

The process continues at Step 135 where resources are made available to establish the priority connection. In one embodiment, one or more non-priority or low-priority connections are simply preempted or terminated in order to provide resources required for the requested priority connection. In another embodiment, however, one or more existing connections may be deprived of part of their bandwidth or certain network resources without requiring that the existing connections be terminated. In another aspect of the invention, if a resource that is required to complete a high-priority call is busy, the system would queue the call for the resource. As the resource frees up, the system would allocate the resource for the high-priority call. In still another embodiment, prompting module 32 may notify users of terminal units 18 with existing connections that a high-priority connection is being attempted and that resources are needed to establish that high-priority connection. Page 11, line 26- Page 12, line 15.

The process continues at decisional Step 140, wherein a determination is made whether sufficient resources are now available to establish the requested priority connection.

If sufficient resources are not available, the process follows the No branch, returning to Step 135, described above, wherein additional resources are made available. If adequate resources are now available to establish the connection, the process continues along the Yes branch to Step 145. At Step 145, the requested priority connection is established and the process ends. Alternatively, the requested priority connection may be placed at the front of a queue for the next available resources. Page 12, line 29-page 13, line 6.

Referring now to FIG. 4, an alternate method for assigning destination based call priority begins at Step 200 where a request to establish a connection is received. Next, at decisional Step 205, a determination is made whether the destination terminal unit 18 is a priority destination. Thus, at the first leg of the call, the call goes to a priority establishment server and based on the various parameters such as caller ID, destination priority, etc., the server may attach a priority certificate to the call, as described below. Page 13, lines 8-17.

If at decisional Step 205 the destination terminal unit 18 is not found to be a priority destination, the process ends. If, however, it is determined that the destination terminal unit 18 is a priority destination, the process continues along the Yes branch of decisional Step 205 to Step 210. At Step 210, a priority certificate is generated according to the priority for the destination terminal unit 18. Page 13 lines 20-30.

Next, at Step 215, the priority certificate generated at Step 210 is transmitted to the source requesting the priority certificate for processing. In an alternative embodiment, the certificate server 22 may transmit the priority certificate back to the originating terminal unit 18 — that is, the terminal unit 18 that requested the priority connection — or, to the call manager 20 for concatenation with a call setup packet. Next, at Step 220, the priority certificate is appended, added, or otherwise coupled to the packets associated with the requested connection. Page 13, line 31-page 14, line 9.

Next, at Step 225, the packets associated with the requested connection are processed in accordance with the priority certificate attached to each packet. Page 14, lines 20-21.

With regard to the independent claims currently under appeal, Appellants provide the following concise explanation of the subject matter recited in the claim elements. For brevity, Appellants do not necessarily identify every portion of the Specification and drawings relevant to the recited claim elements. Additionally, this explanation should not be used to limit Appellants' claims but is intended to assist the Board in considering the appeal of this Application.

Independent Claim 1 of the present application recites a method for assigning call priority in a packet switched environment that includes receiving a request to establish a connection to a dialed number (as an example only, and not by way of limitation, see element 100 of FIG. 3; Page 10, lines 12-15). The method also includes determining a priority for the connection based on the dialed number (as an example only, and not by way of limitation, see element 205 of FIG. 4; Page 12, lines 11-31; and element 30 of FIG. 1; Page 7, lines 13-22) and generating a priority certificate based on the priority (as an example only, and not by way of limitation, see element 210 of FIG. 4; Page 13, lines 24-30). The method additionally includes attaching the priority certificate to the communication packets of the connection (as an example only, and not by way of limitation, see element 220 of FIG. 4; Page 14, lines 8-12) and establishing the connection based on the priority (as an example only, and not by way of limitation, see element 225 of FIG. 4; Page 14, line 20 – Page 15, line 3).

Independent Claim 20 recites a system for assigning call priority in a packet switched environment that includes a means for receiving a request to establish a connection to a dialed number (as an example, and not by way of limitation, see element 20 of FIG. 1; page 7, lines 5-12). The system also includes a means for determining a priority for the connection based on the dialed number (as an example, and not by way of limitation, see element 30 of FIG. 1; page 7, lines 13-22). The system additionally includes a means for generating a priority certificate based on the priority (as an example, and not by way of limitation, see element 28 of FIG. 1; page 8, lines 22-24). The system further includes a means for attaching the priority certificate to the communication packets of the connection (as an example, and not by way of limitation, see element 20 of FIG. 1; page 7 lines 5-12; and element 22 of FIG. 1; page 8, lines 24-27). The system also includes a means for

establishing the connection based on the priority (as an example, and not by way of limitation, see element 20 of FIG. 1; page 7, lines 5-10).

Independent Claim 39 recites a system for assigning call priority in a packet switched environment that includes logic encoded on a computer-readable medium (as an example, and not by way of limitation, see page 8, line 31 to page 9, line 6). The logic is operable to receive a request to establish a connection to a dialed number (as an example, and not by way of limitation, see element 20 of FIG. 1; page 7 lines 5-12) and to determine a priority for the connection based on the dialed number (as an example, and not by way of limitation, see element 30 of FIG. 1; page 7 lines 13-22). The logic is also operable to generate a priority certificate based on the priority (as an example, and not by way of limitation, see element 28 of FIG. 1; page 8 lines 22-24) and to attach the priority certificate to the communication packets of the connection (as an example, and not by way of limitation, see element 20 of FIG. 1; page 7 lines 5-12; and element 22 of FIG. 1; page 8, lines 24-27). The logic is further operable to establish the connection based on the priority (as an example, and not by way of limitation, see element 20 of FIG. 1; page 7, lines 5-10).

Independent Claim 58 recites a method for assigning call priority in a packet switched environment that includes receiving a request to establish a connection to a dialed number (as an example only, and not by way of limitation, see element 100 of FIG. 3; Page 10, lines 12-15). The method also includes determining a priority for the connection based on the dialed number (as an example only, and not by way of limitation, see element 205 of FIG. 4; Page 12, lines 11-31; and element 30 of FIG. 1; Page 7, lines 13-22). The method additionally includes establishing the connection based on the priority (as an example only, and not by way of limitation, see element 225 of FIG. 4; Page 14, line 20 – Page 15, line 3). The method also includes increasing the priority of network voice packets associated with the connection relative to other packets (as an example only, and not by way of limitation, see Page 11, lines 14-25).

Independent Claim 59 recites a method for assigning call priority in a packet switched environment that includes receiving a request to establish a connection to a dialed number (as an example only, and not by way of limitation, see element 100 of FIG. 3; Page

10, lines 12-15). The method also includes determining a priority for the connection based on the dialed number (as an example only, and not by way of limitation, see element 205 of FIG. 4; Page 12, lines 11-31; and element 30 of FIG. 1; Page 7, lines 13-22). The method additionally includes determining whether adequate resources are available for the connection (as an example only, and not by way of limitation, see element 110 of FIG. 3; Page 10, lines 18-21) and if adequate resources are not available, pre-empting other connections to free up resources for the connection (as an example only, and not by way of limitation, see element 135 of FIG. 3; Page 11, line 26 to Page 12, line 28). The method also includes establishing the connection based on the priority using the freed-up resources (as an example only, and not by way of limitation, see element 145 of FIG. 3; Page 13, lines 2-6).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Appellants request that the Board review the Examiner's rejections of Claims 1, 3-20, 22-39, and 41-60 under U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2001/0014095 issued to Kawahata et al. in view of U.S. Patent No. 6,745,043 issued to Lester et al..

ARGUMENT

The Examiner's rejections of Claims 1, 3-20, 22-39, and 41-60 are improper, and the Board should withdraw these rejections for the reasons given below.

Rejection of Claims 1, 3-20, 22-39, and 41-60 under U.S.C. § 103(a) as being unpatentable over _Kawahata_ in view of _Lester_ is Improper

The Examiner rejects Claims 1, 3-20, 22-39, and 41-60 under U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2001/0014095 issued to Kawahata et al. ("_Kawahata_") in view of U.S. Patent No. 6,745,043 issued to Lester et al. ("_Lester_").

I. The Proposed Combination Fails to Teach or Suggest All Elements of Claims 1, 20 and 39

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P § 2131 (quoting _Verdegaal Bros. v. Union Oil Co. of California_, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987)). In addition, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claims" and "[t]he elements must be arranged as required by the claim." M.P.E.P § 2131 (quoting _Richardson v. Suzuki Motor Co._, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989) and _In re Bond_, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)).

Claim 1 recites generating a priority certificate based on a determined priority and attaching the priority certificate to the communication packets of a connection. The Examiner correctly states that _Kawahata_ does not teach using a priority certificate. _Office Action_, page 2. The Examiner then asserts that _Lester_ teaches using a priority certificate at member 28 of Figure 2 of _Lester_ and at an identifier in column 3, lines 64+ and column 4, lines 48+. _Office Action_, page 2. In response to previous arguments made by the Appellants, the Examiner further asserts that "the identifier mentioned in col 3 lines 64+ of [Lester] for prioritizing the communication signal is said, in another embodiment (see col 4 lines 36+) to comprise an identification tag that is used to establish priority." _Office Action_, page 5.

Lester discloses "a switching system that includes a programmable priority communication list. . . . The switching system receives a communication signal that includes a signal identifier. A priority rating based on a comparison of the signal identifier to the priority communication list is assigned to the received communication signal." *Lester*, column 1, lines 59-63. *See also Lester*, column 3, line 66 to column 4, line 8; and FIG. 2. The signal identifier disclosed by *Lester* contains information such as a destination phone number (column 4, lines 12-13), an entered password (column 4, lines 27-38), an identification tag specific to the communication device (column 4, lines 35-37), an indication of whether the signal was initiated by a peripheral or individual communication device (column 4, lines 42-45) or some combination of the above (column 4, lines 48-50), that identifies the communication signal.

Nowhere does *Lester* disclose, teach or suggest generating a priority certificate based on a determined priority and attaching the priority certificate to the communication packets of a connection. The signal identifier disclosed by *Lester*, whether called an identification tag or not, is part of the communication signal that is received by the switching device. *See e.g., Lester*, column 3, lines 61-62. Only <u>after</u> the switching device has received the communication signal and its included signal identifier is the switching device able to determine the priority. *Lester*, column 3, line 66 to column 4, line 8. In other words, *Lester* discloses using the identification tag already attached to the communication signal to determine priority. Thus, to the extent that the signal identifier disclosed by *Lester* may be compared to a priority certificate, the signal identifier is generated based on the origin and/or destination of the communication signal and <u>is not based on</u> a determined priority. Therefore, *Lester* does not disclose generating a priority certificate based on a determined priority.

The combination of *Lester* and *Kawahata* neither expressly or implicitly suggests generating a priority certificate based on a determined priority and attaching the priority certificate to the communication packets. For at least this reason Appellants respectfully submit that Claim 1 is allowable as are all claims depending therefrom. For analogous reasons Appellants also submit that Claims 20 and 39 are allowable as are all claims depending therefrom.

II.   There is No Teaching or Suggestion Supporting the Combination or Modification of *Lester* and *Kawahata*

"The mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." M.P.E.P. §2143.01(III) (citing *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)). "A prior art reference must be considered in its entirety, i.e. as a <u>whole</u>, including portions that would lead away from the claimed invention." M.P.E.P. §2141.02(VI) (citing *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert denied*, 469 U.S. 851 (1984)). "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." M.P.E.P. § 706.02(j) (quoting *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (Bd. Pat. App. & Inter. 1985)).

A.   *The Proposed Combination of* Lester *and* Kawahata *Used with Claims 1, 20 and 39 is Improper*

The Examiner has not provided reasoning to support a conclusion that the claimed invention is obvious in light of the teachings of the references. The Examiner contends that "[i]t would have been obvious to one of ordinary skill in the art at the time of the invention to have used a priority certificate in Kawahata et al (in place of the TOS info) in view of the teachings of Lester in order to promote more efficient processing." *Office Action*, page 2.

Examining *Lester* and *Kawahata* in their entirety it can be seen that the combination would not promote efficient processing and would lead one away from combining the two references. As discussed above *Lester* teaches that a switching device will receive a communication signal that "comprises a signal identifier 28 and a message." *Lester*, column 3, lines 58-63. The signal identifier comprises information such as a phone number, password, or identification tag that may be used in prioritizing the communication signal by comparing it to a priority communication list. *Lester*, column 3, lines 63-67 and column 4, lines 12-37. *Kawahata* discloses a router or exchange receiving a dial number of a terminal from a call-out terminal which is examined to "decide[] whether or not the received dial number is a priority control special number." *Kawahata*, paragraphs 46-49. Upon

determining the priority of the dial number, *Kawahata* discloses editing portions of the message. *See e.g. Kawahata*, FIG. 12, boxes 2, 4, 14, 23 and 28. For example, *Kawahata* discloses that a service type corresponding to the priority class "high priority" may be stored in the TOS field. *Kawahata*, paragraph 136.

Combining *Lester* and *Kawahata*, as suggested by the Examiner, would lead to the priority class stored in the TOS field being edited to include a signal identifier that may be used to determine priority. The router in *Kawahata* would examine the dial number to determine its priority and then, instead of storing the priority information in the TOS field, the router would store a signal identifier that could also be used to determine priority. In essence, the combination proposed by the Examiner discloses a router that uses one set of information to determine priority and then, upon determining priority, stores a second set of information that also can be used to determine priority in the TOS field of the communication. Creating redundant information teaches away from the Examiner's proposed motivation of combining *Lester* and *Kawahata* to improve processing efficiency. Furthermore, Appellants note that merely stating, as the Examiner does, that it would have been obvious to <u>use</u> a priority certificate is not a convincing line of reasoning to show <u>generating</u> a priority certificate and <u>attaching</u> the priority certificate to a communication packet as is claimed. For at least these additional reasons Appellants respectfully submit that Claim 1 is allowable as are all claims depending therefrom. For analogous reasons Appellants also submit that Claims 20 and 39 are allowable as are all claims depending therefrom.

B.   The Proposed Combination of Lester and Kawahata Used with Claims 8, 27 and 46 is Improper

Claim 8 is allowable at least for the reasons set forth above with respect to Claim 1. In addition, Claim 8 recites notifying network users of a need to make resources available for a high-priority connection. With respect to Claim 8 the Examiner states:

> Kawahata et al teaches the invention as discussed above, but does not explicitly teach notifying the other users of a need to make resources available for a high priority connection. However this would have been obvious to one of ordinary skill in the art at the time of the invention in order to be able to maintain the quality of connections for high priority calls, such as the emergency call mentioned in Kawahata et al.

Office Action, page 3. *Kawahata* discloses that if there is congestion along a communication path, the router or exchange at which the congestion was detected "extracts a service type of the voice packet received by itself and executes a processing . . . for eliminating the congestion." *Kawahata*, paragraph 105. This involves preferentially transmitting a high priority class communication while discarding or suppressing a low priority class communication. *Kawahata*, paragraph 105. *Kawahata* further discloses that "if the dialed dial number is a number for an emergency communication destination, even if a congestion is generated on the IP network 16, it is prevented that the quality of a voice related to a communication deteriorate." *Kawahata*, paragraph 138. Thus, *Kawahata* discloses that lower priority packets are discarded or suppressed and that higher priority communications are completed without deterioration. In such a situation, contrary to the assertions of the Examiner, it would not be obvious to notify network users of the need to make resources available because the router at which the congestion has occurred will send the higher priority communications preferentially. More specifically, once the lower priority packets have been suppressed and the higher priority communications have been preferentially sent the needed resources have already been made available. Therefore, the router does not need to notify the lower priority communications of the need to free up resources (the resources have already been freed up) "in order to be able to maintain the quality of connections for high priority calls." *Office Action*, page 3. Thus, it would not have been obvious for *Kawahata* to notify users "in order to be able to maintain the quality of connections" as suggested by the Examiner. *Office Action*, page 3. Therefore, for at least these additional reasons Appellants respectfully request that the rejection of Claim 8 be withdrawn. For analogous reasons Appellants also request that the rejection of Claims 27 and 46 be withdrawn.

C. The Proposed Combination of Lester and Kawahata Used with Claims 10, 29, 48 and 60 is Improper

Claim 10 is allowable at least for the reasons set forth above with respect to Claim 1. In addition, Claim 10 recites that freeing up resources comprises downgrading the quality of service parameters of the other connections. The Examiner contends that "the 'other' connection is 'downgraded' since it is disconnected." *Office Action*, page 3. However, the communication links disclosed in *Lester* are either open or not open, and if a communication

link is not open, then a lower priority communication may be terminated to free resource for the higher priority communication. *Lester*, column 5, lines 2-23. Thus *Lester* only discloses terminating a communication link. *Lester* does not disclose freeing up resources by downgrading the quality of service parameter of the other connections. Therefore, for at least this additional reason Appellants respectfully request that the rejection of Claim 10 be withdrawn. For analogous reasons Appellants also request that the rejection of Claims 29, 48, and 60 be withdrawn.

D. The Proposed Combination of Lester and Kawahata Used with Claims 14-15, 33-34 and 52-53 is Improper

Claims 14 and 15 are allowable at least for the reasons set forth above with respect to Claim 1. In addition, Claim 14 recites that determining whether adequate resources are available comprises determining a path for the connection and determining whether adequate resources are available along the path. Claim 15 recites that the method further comprises determining the resources required to establish the requested connection and provide the connection with priority to the needed resources. With respect to both Claims 14 and 15 the Examiner contends that "adequate resources must be available on the lower link for the call to be connected." *Office Action*, page 4. With respect to Claim 14, the Examiner has not shown how this relates to determining a path for the connection and determining whether adequate resources are available long the path. As mentioned above, *Lester* merely discloses checking if there is an available communication channel and does not disclose checking whether adequate resources are available along the path. *Lester*, column 5, lines 2-23. Furthermore, the Examiner has not provided a basis for its rejection of the remaining elements of Claim 15. More specifically the Examiner has not provided any indication as to how "adequate resources must be available on the lower link for the call to be connected" (*Office Action*, page 4) discloses determining the resources required to establish a requested connection and provide the connection with priority to the needed resources. Therefore, for at least these additional reasons Appellants respectfully request that the rejection of Claims 14-15 be withdrawn. For analogous reasons Appellants also request that the rejection of Claims 33-34, and 52-53 be withdrawn.

**E.   The Proposed Combination of Lester and Kawahata Used with
         Claims 17, 36 and 55 is Improper**

Claim 17 is allowable at least for the reasons set forth above with respect to Claim 1.
In addition, Claim 17 recites monitoring network resources to determine when sufficient
resources are available to establish the requested connection. The Examiner merely states
that "[w]ith regard to claim 17, the lower priority connection is monitored to determine when
available bandwidth becomes available." *Office Action*, page 4. Neither *Kawahata* nor
Lester contain the term "bandwidth" nor does either reference disclose, teach or suggest
monitoring network resources to determine when sufficient resources are available to
establish the requested connection. *Lestor* discloses checking if the switching system has an
available communication channel, not monitoring network resources. *Lestor*, column 5, lines
3-7; Abstract; and FIG 1. *Kawahata* discloses responding to congestion within the IP
network, not establishing a requested connection. *See e.g., Kawahata*, paragraphs 138 and
150. Therefore, for at least these additional reasons Appellants respectfully request that the
rejection of Claim 17 be withdrawn. For analogous reasons Appellants also request that the
rejection of Claims 36 and 55 be withdrawn.

**F.   The Proposed Combination of Lester and Kawahata Used with
         Claims 3, 6, 16, 18-19, 22, 25, 35, 37-38, 41, 44, 54 and 56-57 is
         Improper**

With respect to Claims 3, 6, 16, 18-19, 22, 25, 35, 37-38, 41, 44, 54 and 56-57 the
Examiner has failed to provide a motivation for combining *Lester* and *Kawahata*.

*1.   There is no motivation for the combination used with Claims 3,
        22 and 41*

Claim 3 is allowable at least for the reasons set forth above with respect to Claim 1.
In addition, Claim 3 recites processing the communication packets based on the priority
certificate. With respect to Claim 3, the Examiner simply states "that the packets are
processed based on the certificate (identifier)." *Office Action*, page 2. The Examiner does
not provide any indication as to what is being relied on, what the proposed modification is, or
what the motivation for the modification is. The Examiner has merely restated Claim 3 and
inserted "(identifier)" at the end. To the extent the Examiner is relying on *Lester* and/or

Kawahata Appellants point out that neither *Lester* nor *Kawahata* disclose generating a priority certificate (see above) and thus they can not disclose processing communication packets based on the priority certificate. As discussed above, the identification tag disclosed by *Lester* contains information similar to the information contained within the messages disclosed by *Kawahata*, thus there is no motivation to combine the two references. With respect to Claims 22 and 41 the Examiner relies on previous reasoning stating that it would have been obvious to have a means to carry out the methods above, and that it would have been obvious to implement the process above in software. *Office Action*, page 4. To the extent that Claims 22 and 41 are similar to Claim 3 Appellants repeat the reasoning addressed above with respect to Claims 3. For the reasons discussed above Appellants respectfully request the withdrawal of the rejection of Claims 3, 22 and 41.

2.   *There is no motivation for the combination used with Claims 6,*
         25 and 44

Claim 6 is allowable at least for the reasons set forth above with respect to Claim 1. In addition, Claim 6 recites that the certificate provides the communication packet with a higher priority to access gateway trunks relative to other connections. With respect to Claim 6 the Examiner merely states that "it would be obvious to provide higher access to applications such as gateways, since they provide connection to other applications." *Office Action*, page 3. The Examiner has simply provided a description of what a gateway may be without any support or explanation for why it would be obvious to provide a communication packet with a higher priority to access gateway trunks relative to other connections. There is nothing within *Lester* or *Kawahata* that would provide a motivation to provide higher access to applications such as gateways, as suggested by the Examiner. More specifically, *Lester* and *Kawahata* are concerned with the destination and/or source of the communication and not with the intermediary path. *See e.g. Lester* column 4, lines 12-13, 35-37 and 42-45; *Kawahata* paragraph 47. With respect to Claims 25 and 44 the Examiner relies on previous reasoning stating that it would have been obvious to have a means to carry out the methods above, and that it would have been obvious to implement the process above in software. *Office Action*, page 4. To the extent that Claims 25 and 44 are similar to Claim 6 Appellants

repeat the reasoning addressed above with respect to Claim 6. For the reasons discussed above Appellants respectfully request the withdrawal of the rejection of Claims 6, 25 and 44.

3.   *There is no motivation for the combination used with Claims 16, 35 and 54*

Claim 16 is allowable at least for the reasons set forth above with respect to Claim 1. In addition, Claim 16 recites identifying currently established connections using resources required to establish the requested connection and pre-empting the connections using the required resources to establish the requested connection. With respect to Claim 16 the Examiner merely states that "the 'currently established connection' is the lower priority connection." *Office Action*, page 4. The Examiner fails to provide any indication as to how this relates to the Claim 16, how it makes Claim 16 obvious, or provide any support for its assertion. As discussed above, the communication links disclosed in *Lester* are either open or not open, thus there is no motivation to identify connections using resources required to establish the request connection. *See e.g., Lester*, column 5, lines 2-8. More specifically, because the connections in *Lester* are only open/close there is no need to also identify whether that connection uses resources required to establish the requested connection. With respect to Claims 35 and 54 the Examiner relies on previous reasoning stating that it would have been obvious to have a means to carry out the methods above, and that it would have been obvious to implement the process above in software. *Office Action*, page 4. To the extent that Claims 35 and 54 are similar to Claim 16 Appellants repeat the reasoning addressed above with respect to Claim 16. For the reasons discussed above Appellants respectfully request the withdrawal of the rejection of Claims 16, 35 and 54.

4.   *There is no motivation for the combination used with Claims 18-19, 37-38 and 56-57*

Claims 18 and 19 are allowable at least for the reasons set forth above with respect to Claim 1. In addition, Claim 18 recites monitoring end-point usage of augmented priority, and Claim 19 recites modifying the priority of the connection based on the end-point usage. With respect to Claims 18 and 19 the Examiner simply states that "end usage priority

monitoring and modification would be obvious in view of the fact that the lower priority connections are made based on the types of users present at the end of the phone calls." *Office Action*, page 4. The Examiner provides nothing in support of the "fact" on which its obviousness conclusion is based. Both *Lester* and *Kawahata* disclose comparing information from a communication with similar information within a list or index table. *See e.g., Lester* column 3, lines 66-67; *Kawahata*, paragraph 53. There is nothing within *Lester* or *Kawahata* that would provide a motivation for making lower priority calls based on the types of users present, as suggested by the Examiner. With respect to Claims 37-38 and 56-57 the Examiner relies on previous reasoning stating that it would have been obvious to have a means to carry out the methods above, and that it would have been obvious to implement the process above in software. *Office Action*, page 4. To the extent that Claims 37 and 56 are similar to Claim 18; and that Claims 38 and 57 are similar to Claim 19, Appellants repeat the reasoning addressed above with respect to Claims 18 and 19. Appellants respectfully request the withdrawal of the rejection of Claims 18-19, 37-38 and 56-57.

CONCLUSION

Appellants have demonstrated that the present invention, as claimed, is clearly distinguishable over the prior art cited by the Examiner. Therefore, Appellants respectfully request the Board of Patent Appeals and Interferences to reverse the final rejection of the Examiner and instruct the Examiner to issue a notice of allowance of all claims.

Please charge a fee in amount of **$500.00** to cover the filing fee for this Appeal Brief to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P. The Commissioner is also authorized to charge any other fees or credit any overpayments to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorneys for Appellants

Chad C. Walters
Reg. No. 48,022

Date: January 17, 2007

Correspondence Address:
Customer Number   05073

APPENDIX A: CLAIMS ON APPEAL

1.   (Previously Presented)   A method for assigning call priority in a packet switched environment, comprising:

receiving a request to establish a connection to a dialed number;

determining a priority for the connection based on the dialed number;

generating a priority certificate based on the priority;

attaching the priority certificate to the communication packets of the connection; and

establishing the connection based on the priority.

2.   (Canceled)

3.   (Previously Presented) The method of Claim 1, further comprising processing the communication packets based on the priority certificate.

4.   (Previously Presented)   The method of Claim 1, wherein the certificate provides the communication packet with a higher priority to CPU threads processing communication packets for the connection.

5.   (Original)   The method of Claim 1, further comprising increasing the priority of network voice packets associated with the connection relative to other packets.

6.   (Previously Presented)   The method of Claim 1, wherein the certificate provides the communication packet with a higher priority to access gateway trunks relative to other connections.

7.   (Previously Presented)   The method of Claim 1, wherein the certificate provides the communication packet with a higher priority to access network bandwidth for voice quality relative to other connections.

8.   (Original)   The method of Claim 1, further comprising notifying network users of a need to make resources available for a high-priority connection.

9.   (Original)   The method of Claim 1, further comprising:

determining whether adequate resources are available for the connection;

if not available, pre-empting other connections to free up resources for the connection; and

establishing the connection using the freed-up resources.

10.   (Original)   The method of Claim 9, freeing up resources comprising downgrading the quality of service parameters of the other connections.

11.   (Original)   The method of Claim 9, further comprising notifying affected users that their connections are subject to preemption.

12.   (Original)   The method of Claim 1, further comprising:

determining if adequate resources are available for the connection; and

if not available, queuing the connection as first to receive resources as they become available.

13.   (Original)   The method of Claim 1, further comprising queuing higher priority connections; and

pre-empting connections with a lower relative priority.

14.   (Original)   The method of Claim 9, determining whether adequate resources are available comprising:

determining a path for the connection; and

determining whether adequate resources are available along the path.

15.   (Original)   The method of Claim 1, further comprising determining resources required to establish the requested connection and provide the connection with priority to the needed resources.

16.   (Original)   The method of Claim 1, further comprising:

identifying currently established connections using resources required to establish the requested connection; and

pre-empting the connections using the required resources to establish the requested connection.

17.   (Original)   The method of Claim 1, further comprising monitoring network resources to determine when sufficient resources are available to establish the requested connection.

18.   (Original)   The method of Claim 1, further comprising monitoring end-point usage of augmented priority.

19.   (Original)   The method of Claim 18, further comprising modifying the priority of the connection based on the end-point usage.

20.   (Previously Presented) A system for assigning call priority in a packet switched environment, comprising:

a means for receiving a request to establish a connection to a dialed number;

a means for determining a priority for the connection based on the dialed number;

a means for generating a priority certificate based on the priority;

a means for attaching the priority certificate to the communication packets of the connection; and

a means for establishing the connection based on the priority.

21.   (Canceled)

22.   (Previously Presented) The system of Claim 20, further comprising a means for processing the communications packets based on the priority certificate.

23.   (Original)   The system of Claim 20, wherein the certificate provides the communication packets with a higher priority to CPU threads processing communication packets for the connection.

24.   (Original)   The system of Claim 20, further comprising a means for increasing the priority of network voice packets associated with the connection relative to other packets.

25.   (Previously Presented) The system of Claim 20, wherein the certificate provides the communication packets with a higher priority to access gateway trunks relative to other connections.

26.   (Original)   The system of Claim 20, wherein the certificate provides the communication packets with a higher priority to access to network bandwidth for voice quality relative to other connections.

27.   (Original)   The system of Claim 20, further comprising a means for notifying network users of a need to make resources available for a high-priority connection.

28.   (Original)   The system of Claim 20, further comprising:

a means for determining whether adequate resources are available for the connection;

a means for pre-empting other connections if not available; and

a means for establishing the connection using the freed-up resources.

29.   (Original)   The system of Claim 28, further comprising a means for downgrading the quality of service parameters of other connections.

30.   (Original)   The system of Claim 28, further comprising a means for notifying affected users that their connections are subject to preemption.

31.   (Original)   The system of Claim 20, further comprising:

a means for determining if adequate resources are available for the connection; and

a means for by queuing the connection as first to receive resources as they become available, if resources are not available.

32.   (Original)   The system of Claim 20, further comprising a means for queuing higher priority connections; and

a means for pre-empting connections with a lower relative priority.

33.   (Original)   The system of Claim 28, the means for determining whether adequate resources are available comprising:

a means for determining a path for the connection; and

a means for determining whether adequate resources are available along the path.

34.   (Original)   The system of Claim 20, further comprising a means for determining resources required to establish the requested connection and provide the connection with priority to the needed resources.

35.   (Original)   The system of Claim 20, further comprising:

a means for identifying currently established connections using resources required to establish the requested connection; and

a means for pre-empting the connections using the required resources to establish the requested connection.

36.   (Original)   The system of Claim 20, further comprising a means for monitoring network resources to determine when sufficient resources are available to establish the requested connection.

37.   (Original)   The system of Claim 20, further comprising a means for monitoring end-point usage of augmented priority.

38.   (Original)   The system of Claim 37, further comprising a means for modifying the priority of the connection based on the end-point usage.

39.   (Previously Presented)   A system for assigning call priority in a packet switched environment, comprising:

logic encoded on a computer-readable medium; and

the logic operable to receive a request to establish a connection to a dialed number, determine a priority for the connection based on the dialed number, generate a priority certificate based on the priority, attach the priority certificate to the communication packets of the connection, and establish the connection based on the priority.

40.   (Canceled)

41.   (Original)   The system of Claim 39, the logic further operable to process the communication packets based on the priority certificate.

42.   (Original)   The system of Claim 39, wherein the certificate provides the communication packet with a higher priority to CPU threads associated with the connection.

43.   (Original)   The system of Claim 39, the logic further operable to increase the priority of network voice packets associated with the connection relative to other packets.

44.   (Original)   The system of Claim 39, wherein the certificate provides the communication packet with a higher priority to access gateway trunks relative to other connections.

45.   (Original)   The system of Claim 39, wherein the certificate provides the communication packet with a higher priority to access network bandwidth for voice quality relative to other connections.

46.   (Original)   The system of Claim 39, the logic further operable to notify network users of a need to make resources available for a high-priority connection.

47.   (Original)   The system of Claim 39, the logic further operable to:

determine whether adequate resources are available for the connection;

pre-empting other connections to free up resources for the connection if not available;
and

establish the connection using the freed-up resources.

48.   (Original)   The system of Claim 47, freeing up resources comprising
downgrading the quality of service parameters of other connections.

49.   (Original)   The system of Claim 47, the logic further operable to notify
affected users that their connections are subject to preemption.

50.   (Original)   The system of Claim 39, the logic further operable to:

determine if adequate resources are available for the connection; and

queue the connection if not available, as first to receive resources as they become
available.

51.   (Original)   The system of Claim 39, the logic further operable to:

queue higher priority connections; and

preempt connections with a lower relative priority.

52.   (Original)   The system of Claim 47, logic operable to determine whether
adequate resources are available comprising logic operable to:

determine a path for the connection; and

determine whether adequate resources are available along the path.

53.   (Original)   The system of Claim 39, the logic further operable to
determine resources required to establish the requested connection and provide the
connection with priority to the needed resources.

54.   (Original)   The system of Claim 39, the logic further operable to:

identify currently established connections using resources required to establish the requested connection; and

preempt the connections using the required resources to establish the requested connection.

55.   (Original)   The system of Claim 39, the logic further operable to monitor network resources to determine when sufficient resources are available to establish the requested connection.

56.   (Original)   The system of Claim 39, the logic further operable to monitor end-point usage of augmented priority.

57.   (Original)   The system of Claim 56, the logic further operable to modify the priority of the connection based on the end-point usage.

58.   (Previously Presented)   A method for assigning call priority in a packet switched environment, comprising:

receiving a request to establish a connection to a dialed number;

determining a priority for the connection based on the dialed number;

establishing the connection based on the priority; and

increasing the priority of network voice packets associated with the connection relative to other packets.

59.   (Previously Presented)   A method for assigning call priority in a packet switched environment, comprising:

receiving a request to establish a connection to a dialed number;

determining a priority for the connection based on the dialed number;

determining whether adequate resources are available for the connection;

if not available, pre-empting other connections to free up resources for the connection; and

establishing the connection based on the priority using the freed-up resources.

60.   (Previously Presented) The method of Claim 59, wherein freeing up resources comprises downgrading the quality of service parameters of the other connections.

APPENDIX B: SUBMITTED AMENDMENTS

9.   (Currently Amended) The method of Claim 1, further comprising:

determining whether adequate resources are available for the connection to maintain a first quality of service level;

if not available, pre-empting other connections to free up resources for the connection; and

establishing the connection using the freed-up resources.

14.   (Currently Amended) The method of Claim 9, determining whether adequate resources are available comprising:

determining a path for the connection; and

determining whether adequate resources are available along the path based on the first quality of service level.

28.   (Currently Amended) The system of Claim 20, further comprising:

a means for determining whether adequate resources are available for the connection to maintain a first quality of service level;

a means for pre-empting other connections if not available; and

a means for establishing the connection using the freed-up resources.

33.   (Currently Amended) The system of Claim 28, the means for determining whether adequate resources are available comprising:

a means for determining a path for the connection; and

a means for determining whether adequate resources are available along the path based on the first quality of service level.

47.   (Currently Amended) The system of Claim 39, the logic further operable to:

determine whether adequate resources are available for the connection to maintain a first quality of service level;

pre-empting other connections to free up resources for the connection if not available; and

establish the connection using the freed-up resources.

52.   (Currently Amended) The system of Claim 47, logic operable to determine whether adequate resources are available comprising logic operable to:

determine a path for the connection; and

determine whether adequate resources are available along the path based on the first quality of service level.

59.   (Currently Amended)   A method for assigning call priority in a packet switched environment, comprising:

receiving a request to establish a connection to a dialed number;

determining a priority for the connection based on the dialed number;

determining whether adequate resources are available for the connection to maintain a first quality of service level;

if not available, pre-empting other connections to free up resources for the connection; and

establishing the connection based on the priority using the freed-up resources.

APPENDIX C: EVIDENCE

NONE

APPENDIX D: RELATED PROCEEDINGS

NONE